

“The Consequences of the Military Revolution in Muscovy in Comparative Perspective,” *Comparative Studies in Society and History* 38: 4 (1996): 603-18.

## The Consequences of the Military Revolution in Muscovy in Comparative Perspective\*

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The early modern “military revolution” may be described most simply as the replacement of small cavalry forces by huge gunpowder infantry armies.<sup>1</sup> The revolution was a diffusionary process with a relatively well-understood chronology and geography. The innovations at its core began in northern Italy in the later fifteenth century and spread throughout central, northern, and eastern Europe in the three centuries that followed. Seen in this way, it was a unique and unitary phenomenon. Thus we speak of “the” military revolution, an episode in world history, instead of several different revolutions in the constituent parts of Europe. Nonetheless, the course and impact of the revolution were different in the regions it eventually affected.

This essay will compare the consequences of early modern military reform in Muscovy and the West. The topic has several merits. First, most scholars studying the military revolution and state-building concentrate on Western Europe, paying little or no attention to developments east of the Elbe.<sup>2</sup> This is surprising because there is a large literature on the Muscovite army, much of which is available in languages other than Russian. Second, where we find comparative treatments of Old Russia, they often share a set of traditional though dubious assumptions about the nature of Muscovite history and society: that Muscovy was genetically related to Kievan Rus’; that Mongol domination truncated “Russian” development; that autocracy was a Mongol import; that Muscovy was ruled like a patrimonial estate; that the tsar’s rule was unfettered by “intermediary bodies.”<sup>3</sup> This essay will attempt to introduce recent research into the discussion of Muscovy’s place in the process of early modern military reform. Finally, the particular interpretation of the course and results of the military revolution in Muscovy implied in the comparative literature — that Muscovy is an archtypical example of a despotic state imposing its will on a supine society — is questionable. This essay will argue that the court was not despotic and society not supine, and that this way of looking at the problem misses a fundamental point, namely, that the military reforms brought a social and cultural revolution to Muscovy.

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<sup>1</sup>The original statement of the military revolution thesis was made by M. Roberts in his 1956 lecture, “The Military Revolution, 1560-1660,” which is reprinted in his *Essays in Swedish History* (London: Weidenfeld and Nicolson, 1967), 195-225. There is now a huge literature devoted to the thesis, most of which supports Roberts’ original position. The most recent summary statements are G. Parker, *The Military Revolution. Military Innovation and the Rise of the West, 1500-1800* (Cambridge: Cambridge University Press, 1988) and J. Black, *A Military Revolution? Military Change and European Society, 1550-1800* (Atlantic Highlands, NJ: Humanities Press, 1991). On the historiography of the problem, see C. J. Rogers, “The Military Revolution in History and Historiography,” in *The Military Revolution Debate. Readings on the Military Transformation of Early Modern Europe*, C. J. Rogers, ed. (Boulder, CO and Oxford: Westview Press, 1995), 2-10.

<sup>2</sup>See, for example, J. R. Hale’s *War and Society in Renaissance Europe, 1450-1620* (New York: St. Martin’s Press, 1985) which, despite its title, devotes not a page to Muscovy.

<sup>3</sup>This is true of O. Hintze, “The Formation of States and Constitutional Development: a Study in History and Politics,” in *The Historical Essays of Otto Hintze*, F. Gilbert, ed. (New York: Oxford University Press, 1975), 302-53; P. Anderson, *Lineages of the Absolutist State* (London: Verso, 1974), 328-62; R. Bendix, *Kings or People? Power and the Mandate to Rule* (Berkeley: University of California Press, 1980), 88-127; and B. Downing, “Constitutionalism, Warfare and Political Change in Early Modern Europe,” *Theory and Society* 17 (1988), 11; and B. Downing, *The Military Revolution and Political Change. Origins of Democracy and Autocracy in Early Modern Europe* (Princeton: Princeton University Press, 1992), 38-43. The popularity of these assumptions is due in large measure to reliance on R. Pipes’ *Russia Under the Old Regime* (New York: Charles Scribner’s Sons, 1974). In the non-specialist literature Pipes is cited as an authoritative interpretation, when in fact his is one of several understandings of the nature of Muscovite society.

A complete and detailed comparison of the impact of military reform in Muscovy and the states of the West is far beyond the scope of this discussion. Our aim here will be to provide a schematic overview of the chief consequences of the reform. Pursuant to this goal, the first section below sketches an ideal-typical Western model of the general consequences of the military reforms and argues that the military revolution had four chief results: constitutional conflict, the dislocation and creation of new classes, the regimentation of the army and society, and the rise of “technicality” in the culture of rule. These changes were not solely the result of military reform and neither were they the only alterations caused by the introduction of the new-style forces. The claim made here is less forceful: the reforms *contributed* to the mutations specified and that these mutations were *among* the most general and important. The second section offers a comparison of the Western model to the Muscovite case. The main argument here is that while the military reform brought little change to Muscovy’s political system, its class composition, social divisions, and culture (at least among the service classes) were transformed by the coming of the new army.

### **The Military Revolution and its Consequences in the West**

The introduction of new-style forces in the major kingdoms of the early modern West had four major consequences. Let us begin with constitutional conflict. The political impact of the military revolution in Western Europe manifested itself in terms of heightened tension between reforming central authorities and the two classes that bore the brunt of the military innovations, the nobility and urban commoners. The root of the problem was fiscal. In medieval European government, military outlays were minimal because the crown was not solely responsible for raising heavy cavalry armies: knights were obliged to come to the field ready for battle and generally served without monetary remuneration. In contrast, Renaissance courts assumed a much more active role in raising expansive new-model forces and thereby increased their financial burden.<sup>4</sup> However resourceful the military reformers might be — debasing currency, selling offices, farming out monopolies — they would sometimes be forced to petition their peers and subjects for funds or the rights to raise them.<sup>5</sup> And where this happened, conflict frequently resulted.<sup>6</sup> The existence of representative institutions — parliaments, *cortes*, *Landtagen*, *états généraux* — facilitated the maturation of fiscal discord into constitutional crises.<sup>7</sup> Though similarities among these bodies should not be overstated, it seems obvious that whatever their particular roles, they all served as fora for the articulation of political conflict on a very high level. Certainly national politics could be carried on outside representative bodies, for example in urban and peasant revolts, but the high assemblies were in a sense regular conduits for national affairs. They amplified issues that would have been diffused if they had remained in the localities.

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<sup>4</sup>On the old order and the fiscal impact of the new forces, see the arguments and literature reviewed in Downing, *The Military Revolution*, 74.

<sup>5</sup>Roberts, “The Military Revolution,” 207.

<sup>6</sup>*Ibid.* Downing, *The Military Revolution*, explores this in great detail.

<sup>7</sup>Comparative works routinely point to the uniqueness of these bodies and their importance for early modern constitutional development. See, for example, C. Tilly, “Reflections on the History of European State-Making,” in *The Formation of National States in Western Europe*, C. Tilly, ed. (Princeton: Princeton University Press, 1975), 21-25; and Anderson, *Lineages of the Absolutist State*, 44-48; and Downing, *The Military Revolution*, 21-22, 23-24, 30-31, 74-78.

A second result of the military revolution in the West was class displacement and creation.<sup>8</sup> The superiority of infantry after the introduction of pikes and shoulder-arms diminished the relative importance of heavy cavalry. Since cavalry was the traditional mode of aristocratic combat, this led to a decline in the military significance of the traditional feudal nobility. As a consequence, the basic justification for the privileges enjoyed by the titled elite — i.e., martial service to the king — was called into question. The nobility had to seek other means for maintaining its privileges. Many nobles entered royal offices; others became officers in the new-model forces; some simply removed themselves from service.<sup>9</sup> As the military reform transformed the old cavalry nobility, it created two new classes of state servitors — professional soldiers and administrators. The former appeared first in the form of mercenary units and (a bit later) conscripts. In either case the ranks were filled by men of plebeian origins, while the officer corp was increasingly occupied by aristocrats.<sup>10</sup> The latter became more numerous and specialized as the court evolved into a central bureaucracy. Since education (and especially literacy) was a requirement for court administrative service, those who worked in offices tended to be recruited from the lower nobility, townsmen, and the clergy.<sup>11</sup>

Let us turn now to regimentation. The medieval society of estates was transfigured by the introduction of the new forces. On the one hand, the line between “those who fought” and everyone else was blurred by increases in the size of armies. In place of this dichotomous system, new forms of hierarchical order based on a mix of heredity and merit were forged. In the first fifty years of the seventeenth century the concept of “rank” was introduced into European armies. The tiny cavalry horde — an assembly of high-born peers — neither needed nor could bear a strict chain of command. In the new armies such structures were a necessity if any sort of order was to be achieved. What is perhaps more significant is the way in which modern military style — strict regulation of functions and levels of command — was transferred into the arena of civil government. European societies, crowded with the irregularities that came of a millennium without strong central authority, came to be seen as messy and unresponsive by rulers. All right angles and order, the new-model forces presented themselves as a solution to the problem of social irregularity.<sup>12</sup> Almost everywhere we see increased social regulation. In the most extreme cases (the German states and Sweden), vast systems of military and civil ranks were outlined in turgid legal compendia — the products of a fetishistic love of order and an unrealistic faith in rationality.<sup>13</sup>

Finally, the introduction of gunpowder forces changed the culture of military service.<sup>14</sup> Under the old style military, combat was the exclusive province of lords, duty was occasional, and mores were governed by chivalry. Little was required in the way of technical training for those who served. Logistics were comparatively uncomplicated: equipping and mustering the tiny forces at, say, Agincourt must have been a relatively simple affair. War did not require the crown to make great demands on the country.

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<sup>8</sup>Roberts, “The Military Revolution,” 208-13. Most recently, see M. Mandlmayr and K. Vocelka, “Vom Adelsaufgebot zum stehenden Heer: Bemerkungen zum Funktionswandel des Adels im Kriegswesen der Frühen Neuzeit,” *Wiener Beiträge zur Geschichte der Neuzeit* 8 (1981), 112-25.

<sup>9</sup>Roberts, “The Military Revolution,” 210.

<sup>10</sup>*Ibid.*, 209.

<sup>11</sup>*Ibid.*, 210.

<sup>12</sup>*Ibid.*, 212.

<sup>13</sup>*Ibid.*, 212-13. For a general treatment, see M. Raeff, *The Well-Ordered Police State: Social and Institutional Change through Law in the Germanies and Russia, 1600-1800* (New Haven: Yale University Press, 1983).

<sup>14</sup>See Roberts, “The Military Revolution,” 205 and 212-13, and Downing, *The Military Revolution*, 70.

Indeed contact between state and society related to war was infrequent: few war-taxes were collected, few conscripts were mustered. Every indication is that the nobility was content to leave society to its own devices, and indeed insisted as a point of honor that contact be held to a minimum. With the introduction of masses of shoulder-armed foot soldiers, the cultures of service, supply, and extraction were altered. Forces were in part democratized, service became continual, and was regulated by written codes. Chivalry became an elegiac fact, as in Shakespeare, or an object of parody, as in Cervantes. Written systems of ranks were introduced and eventually spread to society. The “three orders” were replaced by a plurality of places, ranks, and statuses — all arranged neatly in codes, statutes, and *Ordnungen*. Logistics were transformed. Organizational skills were expanded and refined in the emergent military bureaucracies of the sixteenth and seventeenth centuries. The new army required extensive written planning, communication, and record-keeping simply to get it in the field and prevent it from mutinying for lack of pay. Finally, the state increasingly entered the daily lives of citizens as tax collector and policeman — both of whom were armed not only with force but with written instruments to record obligations and regulate behavior. All these cultural changes might be summarized as an increase in “technicality.” Complicated weaponry and tactics transformed soldiering; new, rationalized administrative structures re-worked systems of stratification; and regulation and penetration changed the feel of state-society relations.

### The Impact of the Military Revolution in Muscovy

The military revolution came to Muscovy in roughly three halting stages. Prior to the mid-sixteenth century the Muscovite military was comprised of regional cavalry forces armed with cold steel. Their opponents — Tatars, Lithuanians, Poles — fought in the same way, so nothing more advanced was considered necessary.<sup>15</sup> However in the second half of the sixteenth century the Russians began to encounter new-style forces in the Baltic, and in response significant military reforms were initiated by the Muscovite court.<sup>16</sup> Though the surviving sources do not permit a detailed reconstruction of the course of the reforms, their outline is reasonably clear.<sup>17</sup> First, the court re-figured the army itself. The regime attempted to enhance its control over command assignments by placing limits on precedence disputes (*mestnichestvo*) among officers that sometimes interfered with military activity.<sup>18</sup> Further, the center took steps to unite the traditional cavalry forces in Moscow. In 1551 a plan was formulated to grant estates to approximately one thousand of the “best” cavalry servitors (*deti boiarskie*) in the immediate environs of Moscow,

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<sup>15</sup>See L. J. D. Collins, “The Military Organization and Tactics of the Crimean Tatars during the Sixteenth and Seventeenth Centuries,” in *War, Technology and Society in the Middle East*, V. J. Parry and M. E. Yapp, eds. (London and New York: Oxford University Press, 1975) and W. Majewski, “The Polish Art of War in the Sixteenth and Seventeenth Centuries,” in *A Republic of Nobles. Studies in Polish History to 1864*, J. K. Fedorowicz, ed. (Cambridge and New York: Cambridge University Press, 1982), 179-97.

<sup>16</sup>Throughout this essay “court” or “elite” (rather than the problematic “nobility” or “aristocracy”) will denote the Muscovite courtiers who ruled the empire, the so-called “councilor ranks” (*dumnye chiny*). On them, see N. S. Kollmann, *Kinship and Politics: the Making of the Muscovite Political System, 1375-1547* (Stanford: Stanford University Press, 1987) and R. Crummey, *Aristocrats and Servitors. The Boyar Elite in Russia, 1613-1689* (Princeton: Princeton University Press, 1983).

<sup>17</sup>On the difficulty of interpreting the sources for the mid-century reforms, see E. L. Keenan’s long review of N. E. Nosov, *Stanovlenie soslovno-predstavitel’nykh uchrezhdenii v Rossii* (Leningrad: Nauka, 1969) in *Kritika* 7-8 (1970-72), 67-96.

<sup>18</sup>On the rise of precedence disputes and their interference with military action, see A. Kleimola, “Status, Place, and Politics: the Rise of Mestnichestvo during the *Boiarskoe Pravenie*,” *Forschungen zur osteuropäischen Geschichte* 27 (1980), 195-214. On measures to curb precedence disputes over military appointments, see A. A. Zimin, “K istorii voennykh reform 50-kh godov XVI v.,” *Istoricheskie zapiski* 55 (1956), 344-48.

a reform clearly intended to create a core military force at the immediate call of and dependent on the center.<sup>19</sup> In the third quarter of the century the court founded the Military Service Chancellery (*razriadnyi prikaz*), the clearing house for all military affairs and what would become the most important bureau in Muscovy.<sup>20</sup> Standing gunpowder infantry units, the musketeers (*strel'tsy*), were introduced at mid-century.<sup>21</sup> Musketeer units were armed by the crown and located in Moscow. Finally, and most significantly, the system of remuneration was restructured for all military personnel. The court attempted to commute and centralize the collection of provender rents that had traditionally been granted to court-appointed officials as prebends.<sup>22</sup> Both hereditary (*votchiny*) and prebendal (*pomest'ia*) estates were subjected to a military service requirement.<sup>23</sup> In essence, the regime was rapidly assuming the role of bursar to the expanding and reformed army. Taxes rose accordingly.<sup>24</sup> In preparation for the Smolensk War (1632-34), the court embarked on a second reform effort. Western captains and mercenary units were recruited (not for the first time) to train and fight with the old-style cavalry and musketeers. The government issued weapons, supplies, and cash to the new units. A third and decisive effort at creating new-model forces was undertaken around the Thirteen Years War (1654-67). Again the court recruited Western captains, instructed them to train Russian soldiers, and placed them in command positions. To fill the ranks of the new army, the court began to draft soldiers directly out of the peasant and tax-paying communities. Further, the center took active measures to force cavalymen into the new units. Finally, older and militarily unreliable musketeers were removed from field duty and made into a sort of garrison force.<sup>25</sup>

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<sup>19</sup>See A. A. Zimin, ed., *Tysiachnaia kniga 1550 g. i dvorovaia tetrad' 50-kih godov XVI veka* (Moscow and Leningrad: Izdatel'stvo Akademii Nauk SSSR, 1950), 3-19 and Zimin, "K istorii voennykh reform 50-kih godov XVI v.," 348. As Zimin demonstrates, it is unclear whether this reform was carried out. Nonetheless the intentions of the court are made clear by the plan itself.

<sup>20</sup>The date of the Military Service Chancellery's foundation is unclear, again due to lack of sources. Many scholars have argued that a predecessor of the military office existed as early as the 1530s. See V. I. Buganov, *Razriadnye knigi poslednei chetverti XV-nachala XVII v.* (Moscow: Izdatel'stvo Akademii Nauk SSSR, 1962), 111; I. I. Verner, *O vremeni i prichinakh obrazovaniia Moskovskikh prikazov* (Moscow: Universitetskaia tipografiia, 1907), 55-56; P. B. Brown, "Muscovite Government Bureaus," *Russian History/Histoire Russe* 10 (1983), 324; and N. P. Likhachev, *Razriadnye d'iaki XVI veka* (St. Petersburg: V. S. Balashev, 1888), 80. However the evidence is far from clear. The first unassailable reference to "military scribes" (*razriadnye d'iaki*) is from 1563. See Likhachev, *Razriadnye d'iaki*, 458 and A. A. Zimin, "O slozhenii prikaznoi sistemy na Rusi," *Doklady i soobshcheniia Instituta istorii Akademii Nauk SSSR*, fasc. 3 (Moscow: Izdatel'stvo Akademii Nauk SSSR, 1945), 169-70. The phrase "Military office" (*razriadnaia izba*) appears in 1566. See Zimin, "O slozhenii," 169 (mistakenly writing 1556 for 1566) and Likhachev, *Razriadnye d'iaki*, 458. The term *razriad* was used to denote "Military Service Chancellery" for the first time in 1571. See Likhachev, *Razriadnye d'iaki*, 462 and Zimin "O slozhenii," 169-70.

<sup>21</sup>See Zimin, "K istorii voennykh reform," 354-58; A. V. Chernov, *Vooruzhennye sily Russkogo gosudarstva v XV-XVII vv.* (Moscow: Voennoe izdatel'stvo Ministerstva Oborony SSSR, 1954), 46-52; R. Hellie, *Enserfment and Military Change in Muscovy* (Chicago: University of Chicago Press, 1971), 161-65; and J. Keep, *Soldiers of the Tsar. Army and Society in Russia, 1462-1874* (Oxford: Clarendon Press, 1985), 60-61.

<sup>22</sup>The commutation of provender rents (*kormlenie*) is prescribed in the "edict on provender rents and service" (*prigovor o kormleniakh i sluzhbe*) of 1555/56. The edict is found in the Nikonian Chronicle reprinted in *Polnoe sobranie Russkikh letopisei* (St. Petersburg/Leningrad and Moscow, 1846-), vol. 13, 267-69. For discussions of it, see A. A. Zimin, "'Prigovor' 1555-1556 i likvidatsiia sistemy kormlenii v Russkom gosudarstve," *Istoriia SSSR* (1958), no. 1, 178-82; S. O. Shmidt, "K istorii zemskoi reformy (Sobor 1555-1556 g.)," in *Goroda feodal'noi Rossii. Sbornik statei pamiati N. V. Ustingova*, V. I. Shunkov, ed. et al. (Moscow: Nauka, 1966), 125-34; and Nosov, *Stanovlenie soslovno-predstavitel'nykh uchrezhdenii v Rossii*, 367-86.

<sup>23</sup>Universal service according to graded landholding schedules is prescribed in the "edict on provender rents and service." See *Polnoe sobranie Russkikh letopisei*, vol. 13, 269. See Hellie, *Enserfment*, 36ff. The effect of the reform can perhaps be seen in the appearance (Kashira, 1556) of regional muster records (*desiatnia*) which list servitors according to rank and land entitlements. See M. G. Krotov, "K istorii sostavleniia desiaten (vtoraia polovina XVI v.)," in *Issledovaniia po istochnikovedeniui istorii SSSR dooktiabr'skogo perioda. Sbornik statei*, V. I. Buganov, ed. (Moscow: Izdatel'stvo Akademii Nauk SSSR, 1984), 56-72.

<sup>24</sup>See M. Zlotnik, "Muscovite Fiscal Policy: 1462-1584," *Russian History/Histoire Russe* 6 (1979), 243-58.

<sup>25</sup>On introduction of the new-model forces in the seventeenth century, see Chernov, *Vooruzhennye sily*, 133-98; Hellie, *Enserfment*, 167-201; Keep, *Soldiers of the Tsar*, 80-94.

How do the consequences of the military reform in Muscovy compare to those experienced in the West? We will begin with constitutional conflict. The Muscovite court indeed faced a certain amount of opposition to the introduction of new-model forces. Hellie has argued convincingly that the gentry offered both active (in supporting the Moscow riots of 1648<sup>26</sup>) and passive (in failing to enter new-model units<sup>27</sup>) resistance to military reforms in the seventeenth century.<sup>28</sup> Further, there is some evidence of recalcitrance on the part of the mass of tax-paying people (*tiaghe liudi*) and serfs (*krešt'iane*). All rose in revolt against government policies that included taxation to support the new army. These broad similarities aside, the court faced far less political resistance to the new forces than did Western governments. The reason, which has been widely misunderstood, has to do with a subtle combination of strength on the part of the Moscow elite and consensus between the elite and its servitors. As is often pointed out, the tsar dealt with his minions from a position of relative strength. Both the gentry and townsmen were dependent on the crown. The elite had successfully monopolized cultural capital and economic resources among the service classes. The sons of the provincial gentry had no choice but to seek careers in service: the law mandated it and, in marked contrast to the West, there were no other status-ascriptive contexts in which they could seek social approbation. Moreover, the court granted estates, prebends, and salaries only in exchange for service. And even after conditional service estates (*pomes't'ia*) had become heritable in the seventeenth century, significant economic resources could not be collected by gentry families because of the custom of partible inheritance.<sup>29</sup> The situation of townsmen was similar. Small and relatively poor, the Muscovite merchantry was bound in a caste system of the government's creation in towns controlled by government officials. And, like all other groups, the traders existed in large measure to serve the court.<sup>30</sup> They did so either by paying taxes (in the case of small artisans and traders) or by collecting government duties and managing court enterprises (in the case of wealthy merchants).

Be this as it may, the argument to autocracy and class dependence is one-sided. It assumes that conflict between the court and its servitors is somehow natural and should be widespread. Autocracy is taken as evidence of the state's victory over society. But there is some indication that over the entire period of the reform there existed a broad and stable consensus between the elite and its service classes.<sup>31</sup> Comparison with the Western case is instructive in this regard. Western nobilities often were torn apart by confessional strife. The Muscovite boyars successfully resisted any incursion of confessional reform, and even granting that

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<sup>26</sup>Hellie, *Enserfment*, 136-9, 225, and 247.

<sup>27</sup>*Ibid.*, 224, on petitions and absenteeism.

<sup>28</sup>Throughout this essay "gentry" refers to the landed middle-ranking servitors (*dvoriane* and *deti boiarskie*) who made up the bulk of the traditional cavalry host. On them, see N. Pavlov-Sil'vanskii, *Gosudarstvennye sluzhbiye liudi. Proizhozhdenie russkogo dvorianstva* (St. Petersburg: Gosudarstvennaia tipografiia, 1898); V. I. Novitskii, *Vybornoe i bol'shoe dvorianstvo XVI-XVII vekov* (Kiev: Tip. 1-i Kievsk. arteli pechat. dela, 1915); A. A. Novosel'skii, "Praviashchie gruppy v sluzhilom 'gorode' XVII v.," *Uchenye zapiski RANION* 5 (1929), 315-35; Hellie, *Enserfment and Military Change*, 21-47; Keep, *Soldiers of the Tsar*, 13-55; V. Kivelson, "Community and State: the Political Culture of Seventeenth-Century Muscovy and the Provincial Gentry of the Vladimir-Suzdal' Region" (Ph.D. dissertation, Stanford University, 1987); and C. B. Stevens, *Soldiers on the Steppe. Army Reform and Social Change in Early Modern Russia* (DeKalb, IL: Northern Illinois University Press, 1995).

<sup>29</sup>Muscovy had a sort of private property. See G. Weickhardt, "The Pre-Petrine Law of Property," *Slavic Review* 52 (1993), 663-79 and *idem*, "Due Process and Equal Justice in Muscovite Law," *Russian Review* 51(1992), 463-80. On the effects of partible inheritance, see V. Kivelson, "The Effects of Partible Inheritance: Gentry Families and the State in Muscovy," *Russian Review* 53 (1994), 1-16.

<sup>30</sup>On the merchants and urban classes in general, see H.-J. Torke, *Die staatsbedingte Gesellschaft im Moskauer Reich. Zar und Zemlja in der altrussischen Herrschaftsverfassung 1613-1668* (Leiden: E. J. Brill, 1974); R. Hellie, "The Stratification of Muscovite Society: the Townsmen," *Russian History/Histoire Russe* 5 (1978), 119-75; J. M. Hittle, *The Service City. The State and Townsmen in Russia, 1600-1800* (Cambridge, MA: Harvard University Press, 1979); P. Bushkovitch, *The Merchants of Moscow; 1580-1650* (Cambridge: Cambridge University Press, 1980).

<sup>31</sup>On consensus among the court elite, see H. Rüss, *Adel und Adelsoppositionen in Moskauer Staat* (Wiesbaden: Steiner, 1975); Kollmann, *Kinship and Politics*, 149-52 and 184; and Crummey, *Aristocrats and Servitors*, 34-64.

religious division appeared (in the form of Old Belief), the Old Russian governing classes were never divided by issues of faith. Thus Muscovy experienced no French Religious Wars. Further, in the West the crown and estates were often split on issues bound up with the funding and use of the new-model forces. While it is true that both the Old Russian gentry and townsmen expressed dissatisfaction with certain aspects of the reform in the seventeenth century, there was little systematic resistance to government policy from the provinces. Thus Muscovy suffered no English Civil War or Fronde. It is sometimes argued that the potential for religious and political resistance existed, but that it could not develop because Muscovy was without intermediary bodies, these having been suppressed by the “despotic” state.<sup>32</sup> But in fact Muscovy had several of the mechanisms that proved conducive to the expression of institutionalized conflict in the West, i.e., local corporations<sup>33</sup>, national estates<sup>34</sup>, and a tradition of customary limitations on sovereign action.<sup>35</sup> It is true that none were as well elaborated as in the West, but this may be because the stimulus that led to their enhanced development in Western kingdoms — resistance to the crown — was not very powerful in Muscovy. It is interesting to note that when serious division did appear within the Muscovite governing classes as a result of the dynastic crises of the Time of Trouble, precisely these institutions, and particularly the Assembly of the Land (*zemskii sobor*), were invigorated. But some decades after the Troubles had ended and consensus had re-emerged, they became unnecessary for the purposes of rule and disappeared.

Let us now turn to class displacement and creation. As in the West, the introduction of new-formation military units made the old-style cavalry obsolete, though somewhat later (in the mid-seventeenth century). The proportion of archer/horse in the Muscovite army declined steadily over the course of the sixteenth and seventeenth centuries as the old cavalry was replaced by Western-style forces. As in the West, this brought significant changes to the lives of the provincial servitors — the Muscovite cavalymen lost their traditional military role.<sup>36</sup> But the Muscovite gentry did not — or was not allowed to — abandon state service completely. This is true for reasons already discussed. The average cavalymen needed government service to maintain his class privileges and was in any case probably too poor to do without subsidies from the crown.<sup>37</sup> Given this dependence, the court needed only to threaten the gentry with a reduction of status and wealth to press it into new-formation military service.<sup>38</sup>

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<sup>32</sup>See especially Pipes, *Russia under the Old Regime*, 48-54 and 106-08.

<sup>33</sup>On provincial corporations, see B. Davies, “The Role of Town Governors in the Defense and Military Colonization of Muscovy’s Southern Frontier: The Case of Kozlov, 1635-38” (Ph.D. dissertation, University of Chicago, 1983); V. Kivelson, “Community and State.” Both of these dissertations will shortly be published. Also see B. Davies, “Coercion and Community Interest Representation in Muscovite Local Government,” *Soviet Studies in History* 26 (1987-88), 3-19.

<sup>34</sup>See E. M. Hulbert, “Sixteenth Century Russian Assemblies of the Land: Their Composition, Organization, and Competence” (Ph. D. dissertation, University of Chicago, 1970); J. L. H. Keep, “The Decline of the Zemsky Sobor,” *Slavonic and East European Review* 36 (1957-58), 100-36; Torke, *Die staatsbedingte Gesellschaft*; M. Szeftel, “La participation des assemblées populaires dans la gouvernement central de la Russie depuis l’époque Kéviennne jusqu’à la fin du XVIIIe siècle,” *Gouvernés et gouvernants* 4 (1984), 239-65. For a review of the recent Russian literature, see P. Brown, “The Zemskii Sobor in Recent Soviet Historiography,” *Russian History/Histoire Russe* 10 (1983), 77-90.

<sup>35</sup>On Muscovite political ideology, see E. Keenan, “Muscovite Political Folkways,” *Russian Review* 45 (1986), 115-81; D. Rowland, “The Problem of Advice in Muscovite Tales about the Time of Troubles,” *Russian History/Histoire Russe* 6 (1979), 259-83; D. Rowland, “Did Russian Literary Ideology Place Any Limits on the Power of the Tsar (1540s-1660s)?” *Russian Review* 49 (1990), 125-55; and V. Kivelson, “The Devil Stole His Mind: The Tsar and the 1648 Moscow Uprising,” *American Historical Review* 98 (1993), 733-56.

<sup>36</sup>Hellie, *Enserfment*, 211-26.

<sup>37</sup>Throughout the seventeenth century the gentry petitioned the government for all three: cash entitlements (*oklady*), service estates (*pomest’ia*), and elimination of limitations on the recovery of fugitive serfs. On these petitions, see Hellie, *Enserfment*, 130, 131, 133, 136, and 239-40.

<sup>38</sup> Hellie demonstrates that the government bullied the cavalry into the new units. He also provides data which show movement into the new army: “By 1672, 50.3 percent (19,003) of the *dvoriane* and *deti boiarskie* in seventy-seven southern towns were in new formation regiments,

The reformed cavalymen were joined by two new classes of servitors — paid soldiers and administrators. Unlike in the West, however, both groups were created very rapidly and almost *ex nihilo* by state fiat. Prior to the Livonian war, the Muscovite court had never commanded large infantry formations or a sizable staff of administrators.<sup>39</sup> The elite was thus compelled to raise a European-style army and to create an administrative class to see to its upkeep. Beginning in the second half of the sixteenth century the court began to levy a considerable number of musketeers, primarily from among the urban population<sup>40</sup>; in the 1630s the elite began to draft new-model soldiers and hire foreigners to train them.<sup>41</sup> Over the same period, approximately 1550-1630, we see an appreciable increase in the number of chancelleries (*prikazy*) and the number of secretaries (*d'iaki* and *pod'iachie*) working in them.<sup>42</sup>

The third consequence of military reform noted above was social regimentation and stratification. Early modern Russia offers an extreme case of rapid, thorough-going social division. Muscovy moved from a relatively simple society marked by slight internal division in the fourteenth century to one with many functional groups and hierarchical boundaries in the seventeenth.<sup>43</sup> In every sector of society — the court (*gosudarev dvor* and *moskovskii spisok*), church (*patriarskii dvor*), government administration (*prikazy* and *prikaznye izby*), provincial gentry (*sluzhbiye liudi po otechestvu* serving on the *gorodovoi spisok*), lower service classes (*sluzhbiye liudi po pribornu*), merchants (*gosti*), townsmen (*posadskie liudi*), and peasants — the court imposed classificatory systems that designated the type of service to be performed by members of the groups in question. In theory, everyone served and everyone had a role. The Consiliar Lawcode (*Sobornoe Ulozhenie*) of 1649 describes all this in painstaking detail.<sup>44</sup> The basic difference between Muscovite and Western stratification lies precisely in the role played by the court. Under the relatively lax control of medieval governments, Western societies developed considerable regional, functional, and hierarchical boundaries. The importance of economic developments in this process — especially the growth of national and international commerce — has long been emphasized. When Western kings embarked on programs of military reform, they added new forms of complexity to the mix and often faced resistance from pre-existing groups. In Muscovy there was little of this “spontaneous” social

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compared with only 4.5 percent in 1651. In 1672 the rest of them were in town defensive service (14, 935, or 39.4 percent), and only a handful, 3,921 (10.3 percent) were in the old regimental *sotennaia sluzhba*, which was becoming extinct.” See *Enserfment*, 219. Also see Chernov, *Vooruzhennye sily*, 161; Keep, *Soldiers of the Tsar*, 85-87; and Stevens, *Soldiers on the Steppe*, 34-36 and 76-87. Entire peasant communities were also forced into the new units. See B. Davies, “Village into Garrison: The Militarized Peasant Communities of Southern Muscovy,” *Russian Review* 51 (1992), 481-501.

<sup>39</sup>On Muscovite infantry forces prior to 1550, see Hellie, *Enserfment*, 160. On the early grand princely secretariat, see V. A. Vodov, “Zarozhdenie kantseliarii Moskovskikh kniazei (seredina XIV v. - 1425 g.),” *Istoricheskie zapiski* 103 (1979), 325-49; A. K. Leont'ev, *Obrazovanie prikaznoi systemy upravleniia v Russkom gosudarstve. Iz istorii sozdaniia tsentralizovannogo gosudarstvennogo apparata v kontse XV-pervoi polovine XVI v.* (Moscow: Moskovskii Universitet, 1961); G. Alef, *The Origins of Muscovite Autocracy. The Age of Ivan III*, in *Forschungen zur osteuropäischen Geschichte* 39 (1986), 273-82; Zimin, “O slozhenii prikaznoi systemy na Rusi”; and Verner, *O vremeni i prichinakh obrazovaniia Moskovskikh prikazov*.

<sup>40</sup>Hellie, *Enserfment*, 161.

<sup>41</sup>*Ibid.*, 170-71.

<sup>42</sup>On the *prikazy*, see P. B. Brown, “Early Modern Russian Bureaucracy: the Evolution of the Chancellery System from Ivan III to Peter the Great, 1478-1717,” (Ph.D. dissertation, University of Chicago, 1978) and *idem*, “Muscovite Government Bureaus.” On their staffs, see B. Plavsic, “Seventeenth-Century Chanceries and their Staffs,” in *Russian Officialdom*, W. M. Pintner and D. K. Rowney, ed. (Chapel Hill, NC: University of North Carolina Press, 1980), 19-45 and N. F. Demidova, *Sluzhilaia biurokratiiia v Rossii XVII v. i ee rol' v formirovanii absolutizma* (Moscow: Nauka, 1987).

<sup>43</sup>Hellie discusses this at some length. See R. Hellie, “Warfare, Changing Military Technology, and the Evolution of Muscovite Society,” in *Tools of War. Instruments, Ideas, and Institutions of War, 1445-1871*, J. A. Lynn, ed. (Urbana: University of Illinois Press, 1990), 74-99.

<sup>44</sup>See R. Hellie, ed. and trans., *The Muscovite Law Code (Ulozhenie) of 1649* (Part 1: Text and Translation) (Irvine, CA: Charles Schlacks, 1988).

development: early Muscovite society, overwhelmingly rural and largely isolated from the commercial and cultural influence of parts western, was very simple.<sup>45</sup> As is often noted, the lack of organized social interests in society afforded the Muscovite elite significant though hardly unlimited political authority. It is less often mentioned that the relative weakness of social groups also reduced the power of the Muscovite court. Western monarchs were able to use already organized estates, towns, and corporations as vehicles for the mobilization of support and resources. Muscovite society contained few such groups. As a consequence the Muscovite elite had to create organized groups in society to respond to its needs. Important for us is the fact that these needs were often military, so that it is only a slight exaggeration to say that the history of Muscovite stratification is the history of the government's attempts to raise competitive armies and to mobilize resources in society to support them. This end is clearly reflected in the most basic Muscovite social divisions. On the highest level, the Russian populace was divided according to the kind of resources various groups controlled and the kind of state-service they were to render.<sup>46</sup> Most hereditary military servitors (*sluzhbiye liudi po otechestvu*) controlled peasant labor and were burdened with martial and administrative duties, while contract military servitors (*sluzhbiye liudi po pribornu*) received cash and commercial concessions<sup>47</sup>; taxpayers (*tiaglye liudi*) either engaged in urban trades and paid government duties<sup>48</sup> or were serfs (*krest'iane*), in which case they labored for the gentry; non-taxpayers (*netiaglye liudi*) — especially slaves — controlled no resources and served their owners, who in turn served the tsar.<sup>49</sup>

Finally, let us review the broader cultural effects of the military reforms in Muscovy. The military revolution in the West was accompanied by a movement toward technicality in the culture of state activity. The same was true in Muscovy. The new-model units used relatively complicated arms (increasingly of Russian manufacture<sup>50</sup>) and tactics, and they were drilled according to written procedures<sup>51</sup>; administrative and logistical activity grew more complex and became thoroughly literate<sup>52</sup>; service obligations within the army and outside it were recorded and regulated as never before.<sup>53</sup> However the introduction of technicality had a much more profound impact on Muscovite culture than it did in the West. Prior to the coming of the new armies, the court itself was a rather unsophisticated operation, a fact reflected in the relative poverty and simplicity of government paper.<sup>54</sup> Among the documents issued by the elite and its minions we find legal cases (*pravye gramoty*), tax-assessment edicts (*kormlenye* and *zhalovannye gramoty*), local government charters (*ustavnye, gubnye, and zemskie gramoty*), land registers (*pisovnye knigi*),

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<sup>45</sup>The partial exceptions of Novgorod and Pskov — neither of which were Muscovite prior to the later fifteenth century — must be noted. Significantly, both cities had close ties to the lively Baltic trade. The simplicity of Muscovite society has been described in many places, most notably in D. H. Kaiser, *The Growth of the Law in Medieval Russia* (Princeton: Princeton University Press, 1980), which uses law as an index of social complexity and finds Muscovy to be comparatively simple.

<sup>46</sup>This is V. O. Kliuchevskii's famous formulation. See "Istoriia soslovii v Rossii," in *Sochineniia*, 9 vols. (Moscow: Mysl', 1990), vol. 6, 353.

<sup>47</sup>For a general treatment, see Pavlov-Sil'vanskii, *Gosudarevy sluzhbiye liudi*.

<sup>48</sup>See Hittle, *The Service City*, 21-76.

<sup>49</sup>See R. Hellie, *Slavery in Russia, 1450-1725* (Chicago and London, 1982).

<sup>50</sup>T. Esper, "Military Self-Sufficiency and Weapons Technology in Muscovite Russia," *Slavic Review* 28 (1969), 185-208.

<sup>51</sup>See Hellie, *Enserfment*, 167-68, on the translation of Western drill manuals.

<sup>52</sup>D. Smith, "Muscovite Logistics, 1462-1598," *Slavonic and East European Review* 71 (1993), 35-65.

<sup>53</sup>M. Poe, "Elite Service Registry in Muscovy," *Russian History/Histoire Russe* 21 (1994), 251-88.

<sup>54</sup>Reviews of the history Muscovite government documentation are available in Vodov, "Zarozhdenie kantseliarii Moskovskikh kniazei" and Poe, "Elite Service Registry in Muscovy."

diplomatic paper (*stateinye spiski*), and books of elite genealogy and *res gestae* (*rodoslovnye* and *razriadnye knigi*).<sup>55</sup> Of personnel lists, muster records, and pay-registers we encounter almost nothing.<sup>56</sup> There were few scribes. The grand prince's scriptorium was tiny and undifferentiated.<sup>57</sup> Neither the clergy nor merchantry could provide large pools of literate administrators.<sup>58</sup> All this points to the fact that the Muscovite court was relatively unprepared for the technical burden brought by the incorporation of the new armies. Despite this difficulty, the Muscovite elite succeeded in creating a subtle, powerful, and above all, literate administrative system very rapidly. By 1650, the extent of government documentary production had grown tremendously.<sup>59</sup> Documentary registers (*zapisnye knigi*) recorded incoming and outgoing paper throughout the institutions of the central and local administration.<sup>60</sup> Service registers of various sorts traced the movement, disposition, and rank of tens of thousands of servitors throughout the far-flung empire.<sup>61</sup> Land registers (*pistsorye* and *perepisnye knigi*) were used to record ownership, resolve legal disputes, and, of course, collect taxes.<sup>62</sup> As a consequence of extensive record keeping, the administrative arm of the state developed: the number of scribes grew<sup>63</sup>; the scriptorium, heretofore organized in only the most rudimentary fashion, was divided into chancelleries<sup>64</sup>; political officials increasingly gained expertise as administrators.<sup>65</sup> And the coming of administrative complexity to Muscovy had a significant impact on Old Russian culture, particularly among the Moscow elite. Documentation furthered social stratification by allowing the state to formulate and promulgate elaborate classificatory schemes, as we see in the massive *Ulozhenie* of 1649. Further, documentation changed the character of personal identity. After the arrival of administrative paper, the state could "fix" social position with written instruments. Finally, the habit of reading and writing was introduced to the elite, opening the wider world of literary art for the first time.

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<sup>55</sup>On the early use of legal documents, see Kaiser, *The Growth of the Law in Medieval Russia*. The paucity of Muscovite documents of all types to the mid-sixteenth century is well-known. The best treatment of the meager documentary legacy of early Muscovy remains L. V. Cherepnin, *Russkie feodal'nye arkhivy XIV-XV vv.*, 2 vols. (Moscow and Leningrad: Izdatel'stvo Akademii Nauk SSSR, 1948). For a general description of early Muscovite administration, see S. B. Veselovskii, *Feodal'noe zemlevladienie v severovostochnoi Rusi* (Moscow and Leningrad: Izdatel'stvo Akademii Nauk SSSR, 1947). Also see Kollmann, *Kinship and Politics*, 24-36.

<sup>56</sup>See M. Poe, "Muscovite Personnel Records, 1475-1550: New Light on the Early Evolution of Russian Bureaucracy, in *Jahrbücher für Geschichte Osteuropas* (forthcoming).

<sup>57</sup>Alef cites the following figures concerning the number of state scribes (*d'iaki*) at court: 1470s, fourteen state scribes; 1480s, ten state scribes; 1490s, seventeen state scribes; and 1500-1505, twenty state scribes. See Alef, *The Origins of Muscovite Autocracy*, 273. Alef's data is drawn from A. A. Zimin, "D'iacheskii apparat v Rossii vtoroi poloviny XV -- pervoi treti XVI v.," *Istoricheskie zapiski* 87 (1971), 219-86.

<sup>58</sup>See Bushkovitch, *The Merchants of Muscovy*, 1. Also see S. Baron, "Who Were the Gosti?" *California Slavic Studies* 7 (1973), 1-40.

<sup>59</sup>The explosion of literate administration has not gone unnoticed. See Hellie, *Slavery in Russia*, 603 and Kaiser, *The Growth of the Law in Medieval Russia*, 153-63. For a general treatment of Muscovite documentation, see S. O. Schmidt and S. E. Kniaz'kov, *Dokumenty deloproizvodstva pravitel'stvennykh uchrezhdenii Rossii XVI-XVII vv.* (Moscow: Gosudarstvennyi Istoriko-Arkhivnyi Institut, 1985), 19-20 and 37-38.

<sup>60</sup>Schmidt and Kniaz'kov, *Dokumenty deloproizvodstva*, 19-20 and 37-38.

<sup>61</sup>*Ibid.*, 52-53.

<sup>62</sup>*Ibid.*, 42-43. Also see H. L. Eaton, "Cadasters and Censuses of Muscovy," *Slavic Review* 26 (1967), 54-69 and V. B. Pavlov-Sil'vanskii, *Pistsorye knigi Rossii XVv.* (Moscow: Nauka, 1991).

<sup>63</sup>In 1626 there were 623 chancellery people (*prikaznye liudi*) serving in Moscow. By 1698 there were 2739. In the 1640s 774 secretaries and under-secretaries were employed in the provincial offices; in the 1690s there were over 1900. See Demidova, *Sluzhilaia biurokratiia*, 23 and 37.

<sup>64</sup>In 1550 there were no chancelleries (*prikazy*); in 1626 there were forty-four; and in 1698 there were fifty-five, each with a more or less distinct territorial or functional sphere of activity. See Demidova, *Sluzhilaia biurokratiia*, 23.

<sup>65</sup>See R. Crummey, "The Origins of the Noble Official: The Boyar Elite, 1613," in *Russian Officialdom*, 46-75; G. G. Weickhardt, "Bureaucrats and Boiars in the Muscovite Tsardom," *Russian History/Histoire Russe* 10 (1983), 331-56; and B. O'Brien, "Muscovite *Prikaz* Administration of the Seventeenth Century: The Quality of Leadership," *Forschungen zur osteuropäischen Geschichte* 38 (1986), 223-35.

### Conclusion: the Military Revolution and Social Change

The following table summarizes the differential impact of the military revolution in the West and Muscovy. The severity of consequences has been ranked “high,” “moderate,” and “low.”

#### The Consequences of the Military Revolution in Muscovy and the West

Case	Constitutional Conflict	Class Change	Regimentation	Cultural Change
West	High	Moderate	Low	Low
Muscovy	Low	High	High	High

In contrast to the Western case in which the military reforms brought political conflict, in Muscovy they spurred instead significant changes in what we might broadly term “the socio-cultural sphere.” In order to support the new forces, the state was compelled to substantively alter the shape of society: new classes had to be created, new systems of social classification forged, and the techniques of literate organization introduced. This crucial point has been systematically missed in the comparative literature on constitutional and military development, with significant consequences.

For reasons that go beyond the scope of this essay, comparative analyses of European constitutional development have long focused on the “peculiarity” of Russian political culture. In such treatments Muscovy plays a specific role as the “despotic” counter-instance to the “limited” regimes in the West. Western monarchs were checked by corporations and their subjects’ rights were protected by law. In contrast, the tsar, we are told, virtually owned the realm and his subjects were slaves.<sup>66</sup> According to this argument the result of autocracy and servility was constitutional immutability, a trope familiar from the older literature of “Asiatic despotism.” When this understanding of Muscovite society is applied to the comparative study of the military reforms in Old Russia, the outcome is predictable. In the context of the military revolution, Muscovy is seen as an instance in which a powerful state succeeded in introducing new forces while avoiding “progressive” constitutional conflict.<sup>67</sup> This essay has argued that such a mode of explanation is found wanting on two grounds. First, it presupposes that the Muscovite court and its service classes were in conflict. With some notable exceptions, the elite seems to have enjoyed widespread support among those who served it. Second, Muscovy does not fit the “despotic state-gelatinous society” model very well, because Old Russian society had versions of all the “intermediary bodies” so important to constitutional development in the West. It must be allowed that they did not become well-elaborated institutions for opposition to the crown, but they did not do so precisely because such institutions, in the absence of significant opposition among the governing classes, never had the opportunity to develop in this direction.

<sup>66</sup>This idea has its origins in skewed early modern Western descriptions of Muscovy. See M. Poe, “Russian Despotism: the Origins and Dissemination of an Early Modern Commonplace” (Ph.D. dissertation, University of California, Berkeley, 1993) and G. Scheidegger, *Perverse Abendland-barbarisches Russland. Begegnungen des 16. und 17. Jahrhunderts im Schatten kultureller Missverständnisse* (Zürich: Chronos Verlag, 1993). For modern uses of the idea, see Pipes, *Russia under the Old Regime*; J. Pelenski, “Muscovite Russia and Poland Lithuania, 1450-1600,” in *State and Society in Europe from the Fifteenth-Eighteenth Century*, J. Pelenski, ed. (Warsaw: Warsaw University Press, 1980), 93-120; J. Pelenski, “State and Society in Muscovite Russia and the Mongol-Turkic System in the Sixteenth Century,” *Forschungen zur osteuropäischen Geschichte* 27 (1980), 156-67; and Keep, *Soldiers of the Tsar*, 3 and 32.

<sup>67</sup>This argument is implied in several comparative treatments, notably Hintze, “The Formation of States and Constitutional Development”; Bendix, *Kings or People*, 115-23; Anderson, *Lineages*, 328-41. The most complete rendition is found in Downing, *The Military Revolution*, 38-44.

In any event, the concentration on politics directs attention away from an important aspect of the Muscovite experience with military reform. The Muscovite case implies not so much that a “despotic” state can impose itself on society, but that the level of socio-cultural complexity was an important independent variable in the process of early modern military reform. It is easy to see how this factor operated in Muscovy. Under increasing military pressure, the Muscovite elite set about importing Western military technologies. To support the new forces (as well as older, expanded ones), the boyars had to build a machinery of state far larger and more complicated than anything they had ever experienced or desired. Yet, unlike their Western competitors, they had few resources with which to accomplish this goal. The forest society that they ruled was profoundly primitive: it offered an antiquated cavalry and tiny group of scribes with which the elite had to construct a new-model army and administration; it possessed few organized social interests on which the center could call for aid; and it contained almost no members with the skills necessary to manage a large, gunpowder army. Beginning in the mid-sixteenth century, the court began to cultivate resources in each of these areas — military-administrative, social, and technical. The process was painstaking and results dramatic. First, the autocratic state was born, if not autocratic political culture. What had in 1450 been a tiny collection of warriors managing a protection operation in the forests and on the trade routes of northeastern Rus’ became by 1650 a large administrative system ruling a huge empire. Second, the military reforms introduced the germs of modern social complexity into the context of traditional Muscovite society. In 1450, Muscovy comprised three classes, two of which were completely uncoordinated: a small elite (including clerics), a tiny merchantry, and a huge peasantry. By 1650, the elite included an administrative class and commanded a class of professional soldiers. The townsmen and peasants had been organized for state-service. And finally, Old Russian culture — illiterate, isolated, and tradition-bound — began to move into a new era. Literacy in particular changed cultural patterns, tastes, and (more speculatively) habits of the mind. In short, in the course of a century under the impact of the military reforms, Muscovite state and society ceased to be medieval and set on the road to modernity.